

Serial No. 10/801,273**Amendment in Resp. to Off. Action of March 15, 2006****UTILITY PATENT****B&D No. JK01488A**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A miter saw, comprising:

a base having a support surface for at least partially supporting a workpiece;

a workpiece positioning fence coupled to the base, said positioning fence being orientated substantially perpendicular to the support surface; and

a cutting assembly pivotally mounted on the miter saw to achieve a plurality of positions, said cutting assembly including:

a motor orientated substantially perpendicular to an arbor for rotating a circular saw blade; and

a gear assembly configured and arranged to transfer the rotational energy of the motor to the arbor,

wherein the gear assembly and motor are configured so as to not contact the workpiece position fence when the cutting assembly is disposed at the cutting assembly's closest position to the base when mitering at least a 45° (forty-five degree) from a plane substantially perpendicular to the workpiece positioning fence.

Claim 2 (original): The miter saw of claim 1, wherein the gear assembly includes a helical gear set coupled to the motor and a bevel gear set between the helical gear set and the arbor.

Claim 3 (original): The miter saw of claim 1, wherein the gear assembly includes a helical gear set coupled to the motor and a jack shaft extending between the helical gear set and a bevel gear set coupled to the arbor.

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Claim 4 (original): The miter saw of claim 1, further comprising a gear box for enclosing the gear assembly, said gear box being tapered in the direction of the base.

Claim 5 (original): The miter saw of claim 1, further comprising a trunnion disposed between the cutting assembly and the base, said trunnion being constructed so as to permit the cutting assembly to bevel with respect to the base.

Claim 6 (original): The miter saw of claim 1, further comprising a turntable pivotally mounted to the base, said turntable being constructed so as to rotate the cutting assembly with respect to the workpiece positioning fence.

Claim 7 (original): The miter saw of claim 1, wherein the miter saw is at least one of a chop-type miter saw and a sliding miter saw.

Claims 8-16 (canceled).

Claim 17 (original): A saw, comprising:

- a base having a support surface for at least partially supporting a workpiece;
- a workpiece positioning fence coupled to the base, said positioning fence being orientated substantially perpendicular to the support surface; and
- a cutting assembly pivotally mounted on the saw to achieve a plurality of positions, said cutting assembly including:
 - a motor orientated substantially perpendicular to an arbor for rotating a circular saw blade; and
 - a jack shaft having a first end with a helical gear and a second end having a bevel gear, said jack shaft being configured to transfer the rotational energy from the motor to the arbor,

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wherein the arbor includes a bevel gear for mechanically coupling with the bevel gear included on the jack shaft.

Claim 18 (original): The saw of claim 17, further comprising a turntable coupled to the base, said turntable being configured to adjust the angular orientation of the saw blade with respect to a positioning fence.

Claim 19 (original): The saw of claim 17, further comprising a trunnion disposed between the support and the saw base for beveling the saw blade with respect to the support surface.

Claim 20 (original): The saw of claim 17, wherein the cutting assembly pivot point is further away from the base than the center of rotation of the saw blade when the mounting arm is parallel to the base.

Claim 21 (original): The saw of claim 17, wherein the saw is at least one of a chop saw, a chop-type miter saw, a sliding miter saw, and a beveling miter saw.

Claim 22 (original): The saw of claim 17, further comprising a gear box coupling the motor and the saw blade, wherein the gear box is tapered in the direction of the base.

Claim 23 (original): The saw of claim 22, further comprising a flange for securing the circular saw blade to the arbor, wherein the gear box terminates adjacent the flange.

Claim 24 (original): A miter saw, comprising:

a base having a support surface for at least partially supporting a workpiece;

a workpiece positioning fence coupled to the base, said positioning fence being orientated substantially perpendicular to the support surface;

a turntable pivotally mounted to the base, said turntable being constructed so as to rotate with respect to the workpiece positioning fence; and

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a cutting assembly pivotally mounted to the turntable so as to achieve a plurality of positions, said cutting assembly including:

a motor orientated substantially perpendicular to an arbor for rotating a circular saw blade; and

a gear assembly configured and arranged to transfer the rotational energy of the motor to the arbor,

wherein the gear assembly and motor are configured so as to not contact the workpiece position fence when the cutting assembly is disposed at the cutting assembly's closest position to the base when mitering at 45° (forty-five degrees) from a plane substantially perpendicular to the workpiece positioning fence.

Claim 25 (original): The miter saw of claim 24, further comprising a trunnion disposed between the cutting assembly and the turntable, said trunnion being constructed so as to permit the cutting assembly to bevel with respect to the base.

Claim 26 (original): The miter saw of claim 24, wherein the periphery of the saw blade is substantially equal to the interface between the support surface and the positioning fence, on the workpiece positioning side, when the cutting assembly is disposed in a full-cut position.

Claim 27 (original): The miter saw of claim 24, wherein the gear assembly includes a helical gear set coupled to the motor and a bevel gear set between the helical gear set and the arbor.

Claim 28 (original): The miter saw of claim 24, wherein the gear assembly includes a helical gear set coupled to the motor and a jack shaft extending between the helical gear set and a bevel gear set coupled to the arbor.

Claim 29 (original): The miter saw of claim 24, further comprising a gear box coupling the

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motor and the circular saw blade, wherein the gear box is tapered in the direction of the base.

Claim 30 (original): The miter saw of claim 24, wherein the cutting assembly pivot point is further away from the base than the center of rotation of the circular saw blade when the mounting arm is parallel to the base.

Claims 31-33 (canceled).